

### REMARKS

#### I. CERTAIN CLAIMS ARE AMENDED

Applicants amended some of the pending claims primarily to improve their form and reformat some of the previously dependent claims into independent claims. For example, claim 22 (previously dependent from claim 1) is now an independent claim incorporating limitations of claim 1. Similarly, claim 27 (previously dependent from claim 1) is also now an independent claim including substantially the limitations of claim. Claim 1 has been amended to include several recitations which had been inadvertently omitted from that claim in the Amendment Under 37 C.F.R. § 1.111 of August 27, 2002.

No new matter or new issues have been introduced by the Supplemental Amendment.

### CONCLUSION

Applicants respectfully submit that the application is in condition for allowance and request a notice of allowance for all the pending claims. Should the Examiner determine that any further action is necessary to place this application in condition for allowance, the Examiner is kindly requested and encouraged to telephone Applicants' undersigned representative at the number listed below.

It is believed that no fees (other than those authorized herein) are due in connection with this response. However, if any additional fees are determined to be due, the Commissioner is hereby authorized to charge such fees to the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

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APPENDIX A

1. ([Once]Twice amended) A method of modifying a substrate material by means of a [said] bacterial [starter] culture [being] which is capable of being metabolically active in said [food and/or food product starting material] substrate, whereby the bacterial culture is not [being] susceptible to attack by bacteriophages, [bacterial starter culture made by a] the method comprising

- (i) isolating a bacterial strain which is not capable of DNA replication, RNA transcription or protein synthesis in said [food and/or food product starting] substrate material but is capable of metabolically modifying the [food and/or food product starting] substrate material,
- (ii) propagating the isolated bacterial strain in a medium wherein the strain is capable of replicating to obtain [the] a bacterial [starter] culture of said strain[.],
- (iii) adding the thus obtained bacterial culture to the substrate material and keeping the substrate material under conditions where the culture is metabolically active,

whereby, if the substrate material is contaminated with a bacteriophage, the metabolic activity of the bacterial culture is substantially unaffected by the bacteriophage.

3. (Once amended) A method according to claim 2 wherein the bacterial strain is a mutant strain [being] which is auxothrophic in respect of a compound which is not present in the substrate material and which is required by the strain for replication.

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18. (Twice amended) A modified lactic acid bacterium that is modified to become incapable of performing DNA replication, RNA transcription or protein synthesis in a [specifically defined] substrate material which is limited with respect to at least one compound that is required by the [bacterial strain] modified lactic acid bacterium for DNA replication, RNA transcription or protein synthesis, said modified [bacterial strain] lactic acid bacterium is capable of being metabolically active in said substrate material, whereby the [strain] modified lactic acid bacterium is not susceptible to attack by bacteriophages, subject to the limitation, that the modified lactic acid bacterium [is] does not include a strain selected from the group consisting of strain DN101, DN102, DN103, DN104 and DN105 (DSM12289).

19. (Once amended) A modified lactic acid bacterium according to claim 18 [wherein the bacterial strain] which is a mutant strain [being] that is auxothrophic in respect of a compound which is not present in the substrate material and which is required by the [strain] modified lactic acid bacterium for replication.

20. (Once amended) A modified lactic acid bacterium according to claim 19 wherein the mutant strain is a *thyA* mutant including *Lactococcus lactis* strain MBP71 deposited under the accession number DSM12891.

21. (Once amended) A starter culture [compostion] composition comprising the modified lactic acid bacterium of claim 18.

22. (Once amended) A starter culture composition comprising [a]:  
  
(A) a first lactic acid bacterium [obtainable] prepared by [the] a method [according to claim 1 in combination with] comprising:

- (i) isolating the first lactic acid bacterium strain which is not capable of DNA replication, RNA transcription or protein synthesis in said starter culture composition but is capable of metabolically modifying the starter culture composition,
- (ii) propagating the lactic acid bacterium strain in a medium wherein the lactic acid bacterium strain is capable of replicating to obtain a bacterial culture of said lactic acid bacterium strain,
- (iii) adding the thus obtained bacterial culture to the starter culture composition and keeping the starter culture composition under conditions where the bacterial culture is metabolically active,

whereby, if the starter culture composition is contaminated with a bacteriophage, the metabolic activity of the bacterial culture is substantially unaffected by the bacteriophage; and

(B) at least one further lactic acid bacterium.

26. (Twice amended) A method of preparing a food and/or a feed product, comprising adding a bacterial starter culture to a food and/or a feed product starting material, said bacterial starter culture being capable of being metabolically active in said food and/or feed product starting material, the bacterial starter culture not being susceptible to attack by bacteriophages, the bacterial starter culture made by a method comprising

- (i) isolating a bacterial strain which is not capable of DNA replication, RNA transcription or protein synthesis in said food and/or feed product starting

material but is capable of metabolically modifying the food and/or feed product starting material,

- (ii) propagating the isolated bacterial strain in a medium wherein the strain is capable of replicating to obtain the bacterial starter culture of said strain, and

- (iii) adding the bacterial culture to the food and/or feed product starting material and maintaining the thus-obtained inoculated food and/or feed product starting material under such conditions that the bacterial strain of the bacterial starter culture is metabolically active,

whereby, if the food and/or feed product starting material is contaminated with a bacteriophage, the metabolic activity of the bacterial starter culture is substantially unaffected by the bacteriophage.

27. (Twice amended) A method of preventing a lactic acid bacterial starter culture infection by bacteriophages in the manufacturing of a food and/or feed product, the method comprising adding to the food and/or feed product a starter culture comprising a lactic acid bacterium prepared by a method comprising:

- (i) isolating a lactic acid bacterium strain which is not capable of DNA replication, RNA transcription or protein synthesis in said food and/or feed product but is capable of metabolically modifying the food and/or feed product,
- (ii) propagating the lactic acid bacterium strain in a medium wherein the lactic acid bacterium strain is capable of replicating to obtain the starter culture of said lactic acid bacterium strain,

(iii) [27. (Once amended) A method of preventing a lactic acid bacterial starter culture infection by bacteriophages in the manufacturing of a food or feed product, the method comprising adding as a] adding the thus obtained starter culture [a lactic acid bacterium obtained by] to the [method according to claim 1 to a] food and/or feed product [starting material] which is limited with respect to at least one compound that is required by the [bacterial] lactic acid bacterium strain for DNA replication, RNA transcription or protein synthesis [to a food and/or feed product starting material] and keeping the [thus inoculated starting material] food and/or feed product under conditions where the [lactic acid bacterium] starter culture is metabolically active,[whereby, if the substrate material is contaminated with a bacteriophage, the metabolic activity of the bacterial] whereby, if the food and/or feed product is contaminated with a bacteriophage, the metabolic activity of the starter culture is substantially unaffected by the bacteriophage.

31. (Once amended) A method of preparing a dairy flavouring and/or a product for cheese flavouring comprising, adding a bacterial starter culture to a dairy flavouring and/or a product for cheese flavouring starting material, said bacterial starter culture being capable of being metabolically active in said dairy flavouring and/or product for cheese flavouring starting material, the bacterial starter culture not being susceptible to attack by bacteriophages, the bacterial starter culture made by a method comprising

- (i) isolating a bacterial strain which is not capable of DNA replication, RNA transcription or protein synthesis in said dairy flavouring

and/or product for cheese flavouring starting material but is capable of metabolically modifying the dairy flavouring and/or product for cheese flavouring starting material,

- (ii) propagating the isolated bacterial strain in a medium wherein the isolated bacterial strain is capable of replicating to obtain the bacterial starter culture of said isolated bacterial strain, and
- (iii) adding the bacterial culture to the dairy flavouring and/or a product for cheese flavouring starting material and maintaining the thus-obtained inoculated dairy flavouring and/or product for cheese flavouring starting material under such conditions that the bacterial strain of the bacterial starter culture is metabolically active,

whereby, if the dairy flavouring and/or product for cheese flavouring starting material is contaminated with a bacteriophage, the metabolic activity of the bacterial starter culture is substantially unaffected by the bacteriophage.